

Dear editor

We could address all comments and make the changes.

Please find here our answers:

- Note that it is perfectly fine to cite preprints (moreover, this manuscript seems to be in press in Nature Sustainability)

REPLY: OK, we kept it.

- Do you confirm that pH was expressed on the SWS? Why not the total scale which is the scale recommended by guides to best practices? Furthermore, it is not clear how you made the conversion from the NIST scale to the SWS. This must be explained in the manuscript.

REPLY: We recalculated the pH according to the reference given in the methods now (Badocco et al., 2021), plotted the figures newly and changed the text where changes needed to be done to address the slightly different Omega-values.

- I assume that "kgw" should be "kg sw", right?

REPLY: Changed

- The use of extra commas is potentially confusing for relative small number with only 4 digits. Change, for example "2,400" to "2400" which is common practice.

REPLY: We changed this.

Thank you very much for helping to improve the manuscript.